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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/055,061

DATE: 02/07/2002

TIME: 11:09:48

Input Set : N:\Crf3\RULE60\10055061.raw

Output Set: N:\CRF3\02072002\J055061.raw

1 <110> APPLICANT: Bertin, John  
 2 <120> TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED  
 3 PROTEIN FAMILY AND USES THEREOF  
 4 <130> FILE REFERENCE: 07334-076001  
 5 <140> CURRENT APPLICATION NUMBER: 10/055,061  
 6 <141> CURRENT FILING DATE: 2002-01-22  
 8 <150> PRIOR APPLICATION NUMBER: US/09/099,041A  
 9 <151> PRIOR FILING DATE: 1998-06-17  
 12 <150> PRIOR APPLICATION NUMBER: 09/019,942  
 13 <151> PRIOR FILING DATE: 1998-02-06  
 14 <160> NUMBER OF SEQ ID NOS: 37  
 15 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 1931  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Homo sapiens  
 21 <220> FEATURE:  
 22 <221> NAME/KEY: CDS  
 23 <222> LOCATION: (214)...(1833)  
 24 <400> SEQUENCE: 1

25	ccacgcgtcc ggtcagctct ggttcggaga agcagcggct ggcgtgggcc atccggggaa	60
26	tgggcgcctt cgtgacctag tggtgcgggg caaaaagggt cttgccggcc tcgctcgtgc	120
27	aggggcgtat ctgggcgcct gacgcgcggcg tgggagcctt gggagccgcc gcagcagggg	180
28	gcacaccgga aaccggcctg agcgcgcggg acc atg aac ggg gag gcc atc tgc	234
29	Met Asn Gly Glu Ala Ile Cys	
30	1 5	
31	agc gcc ctg ccc acc att ccc tac cac aaa ctc gcc gac ctg cgc tac	282
32	Ser Ala Leu Pro Thr Ile Pro Tyr His Lys Leu Ala Asp Leu Arg Tyr	
33	10 15 20	
34	ctg agc cgc ggc gcc tct ggc act gtg tcg tcc gcc cgc cac gca gac	330
35	Leu Ser Arg Gly Ala Ser Gly Thr Val Ser Ser Ala Arg His Ala Asp	
36	25 30 35	
37	tgg cgc gtc cag gtg gcc gtg aag cac ctg cac atc cac act ccg ctg	378
38	Trp Arg Val Gln Val Ala Val Lys His Leu His Ile His Thr Pro Leu	
39	40 45 50 55	
40	ctc gac agt gaa aga aag gat gtc tta aga gaa gct gaa att tta cac	426
41	Leu Asp Ser Glu Arg Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His	
42	60 65 70	
43	aaa gct aga ttt agt tac att ctt cca att ttg gga att tgc aat gag	474
44	Lys Ala Arg Phe Ser Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu	
45	75 80 85	
46	cct gaa ttt ttg gga ata gtt act gaa tac atg cca aat gga tca tta	522
47	Pro Glu Phe Leu Gly Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu	

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48		90		95		100		
49	aat gaa ctc cta cat agg aaa act gaa tat cct gat gtt gct tgg cca							570
50	Asn Glu Leu Leu His Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro							
51	105		110		115			
52	ttg aga ttt cgc atc ctg cat gaa att gcc ctt ggt gta aat tac ctg							618
53	Leu Arg Phe Arg Ile Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu							
54	120		125		130		135	
55	cac aat atg act cct cct tta ctt cat cat gac ttg aag act cag aat							666
56	His Asn Met Thr Pro Pro Leu Leu His His Asp Leu Lys Thr Gln Asn							
57		140		145		150		
58	atc tta ttg gac aat gaa ttt cat gtt aag att gca gat ttt ggt tta							714
59	Ile Leu Leu Asp Asn Glu Phe His Val Lys Ile Ala Asp Phe Gly Leu							
60		155		160		165		
61	tca aag tgg cgc atg atg tcc ctc tca cag tca cga agt agc aaa tct							762
62	Ser Lys Trp Arg Met Met Ser Leu Ser Gln Ser Arg Ser Ser Lys Ser							
63		170		175		180		
64	gca cca gaa gga ggg aca att atc tat atg cca cct gaa aac tat gaa							810
65	Ala Pro Glu Gly Gly Thr Ile Ile Tyr Met Pro Pro Glu Asn Tyr Glu							
66		185		190		195		
67	cct gga caa aaa tca agg gcc agt atc aag cac gat ata tat agc tat							858
68	Pro Gly Gln Lys Ser Arg Ala Ser Ile Lys His Asp Ile Tyr Ser Tyr							
69	200		205		210		215	
70	gca gtt atc aca tgg gaa gtg tta tcc aga aaa cag cct ttt gaa gat							906
71	Ala Val Ile Thr Trp Glu Val Leu Ser Arg Lys Gln Pro Phe Glu Asp							
72		220		225		230		
73	gtc acc aat cct ttg cag ata atg tat agt gtg tca caa gga cat cga							954
74	Val Thr Asn Pro Leu Gln Ile Met Tyr Ser Val Ser Gln Gly His Arg							
75		235		240		245		
76	cct gtt att aat gaa gaa agt ttg cca tat gat ata cct cac cga gca							1002
77	Pro Val Ile Asn Glu Glu Ser Leu Pro Tyr Asp Ile Pro His Arg Ala							
78		250		255		260		
79	cgt atg atc tct cta ata gaa agt gga tgg gca caa aat cca gat gaa							1050
80	Arg Met Ile Ser Leu Ile Glu Ser Gly Trp Ala Gln Asn Pro Asp Glu							
81		265		270		275		
82	aga cca tct ttc tta aaa tgt tta ata gaa ctt gaa cca gtt ttg aga							1098
83	Arg Pro Ser Phe Leu Lys Cys Leu Ile Glu Leu Glu Pro Val Leu Arg							
84	280		285		290		295	
85	aca ttt gaa gag ata act ttt ctt gaa gct gtt att cag cta aag aaa							1146
86	Thr Phe Glu Glu Ile Thr Phe Leu Glu Ala Val Ile Gln Leu Lys Lys							
87		300		305		310		
88	aca aag tta cag agt gtt tca agt gcc att cac cta tgt gac aag aag							1194
89	Thr Lys Leu Gln Ser Val Ser Ser Ala Ile His Leu Cys Asp Lys Lys							
90		315		320		325		
91	aaa atg gaa tta tct ctg aac ata cct gta aat cat ggt cca caa gag							1242
92	Lys Met Glu Leu Ser Leu Asn Ile Pro Val Asn His Gly Pro Gln Glu							
93		330		335		340		
94	gaa tca tgt gga tcc tct cag ctc cat gaa aat agt ggt tct cct gaa							1290
95	Glu Ser Cys Gly Ser Ser Gln Leu His Glu Asn Ser Gly Ser Pro Glu							
96		345		350		355		

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97  act tca agg tcc ctg cca gct cct caa gac aat gat ttt tta tct aga 1338
98  Thr Ser Arg Ser Leu Pro Ala Pro Gln Asp Asn Asp Phe Leu Ser Arg
99  360                               365                               370                               375
100  aaa gct caa gac tgt tat ttt atg aag ctg cat cac tgt cct gga aat 1386
101  Lys Ala Gln Asp Cys Tyr Phe Met Lys Leu His His Cys Pro Gly Asn
102                               380                               385                               390
103  cac agt tgg gat agc acc att tct gga tct caa agg gct gca ttc tgt 1434
104  His Ser Trp Asp Ser Thr Ile Ser Gly Ser Gln Arg Ala Ala Phe Cys
105                               395                               400                               405
106  gat cac aag acc att cca tgc tct tca gca ata ata aat cca ctc tca 1482
107  Asp His Lys Thr Ile Pro Cys Ser Ser Ala Ile Ile Asn Pro Leu Ser
108                               410                               415                               420
109  act gca gga aac tca gaa cgt ctg cag cct ggt ata gcc cag cag tgg 1530
110  Thr Ala Gly Asn Ser Glu Arg Leu Gln Pro Gly Ile Ala Gln Gln Trp
111  425                               430                               435
112  atc cag agc aaa agg gaa gac att gtg aac caa atg aca gaa gcc tgc 1578
113  Ile Gln Ser Lys Arg Glu Asp Ile Val Asn Gln Met Thr Glu Ala Cys
114  440                               445                               450                               455
115  ctt aac cag tcg cta gat gcc ctt ctg tcc agg gac ttg atc atg aaa 1626
116  Leu Asn Gln Ser Leu Asp Ala Leu Leu Ser Arg Asp Leu Ile Met Lys
117                               460                               465                               470
118  gag gac tat gaa ctt gtt agt acc aag cct aca agg acc tca aaa gtc 1674
119  Glu Asp Tyr Glu Leu Val Ser Thr Lys Pro Thr Arg Thr Ser Lys Val
120                               475                               480                               485
121  aga caa tta cta gac act act gac atc caa gga gaa gaa ttt gcc aaa 1722
122  Arg Gln Leu Leu Asp Thr Thr Asp Ile Gln Gly Glu Glu Phe Ala Lys
123  490                               495                               500
124  gtt ata gta caa aaa ttg aaa gat aac aaa caa atg ggt ctt cag cct 1770
125  Val Ile Val Gln Lys Leu Lys Asp Asn Lys Gln Met Gly Leu Gln Pro
126  505                               510                               515
127  tac ccg gaa ata ctt gtg gtt tct aga tca cca tct tta aat tta ctt 1818
128  Tyr Pro Glu Ile Leu Val Val Ser Arg Ser Pro Ser Leu Asn Leu Leu
129  520                               525                               530                               535
130  caa aat aaa agc atg taagtgactg tttttcaaga agaaatgtgt ttcataaaag 1873
131  Gln Asn Lys Ser Met
132  540
133  gatatttata aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 1931
135 <210> SEQ ID NO: 2
136 <211> LENGTH: 540
137 <212> TYPE: PRT
138 <213> ORGANISM: Homo sapiens
139 <400> SEQUENCE: 2
140  Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr Ile Pro Tyr His
141  1                               5                               10                               15
142  Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala Ser Gly Thr Val
143  20                               25                               30
144  Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val Ala Val Lys His
145  35                               40                               45
146  Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg Lys Asp Val Leu

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147	50	55	60
148	Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe Ser Tyr Ile Leu Pro		
149	65	70	75 80
150	Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe Leu Gly Ile Val Thr Glu		
151	85	90	95
152	Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His Arg Lys Thr Glu		
153	100	105	110
154	Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile Leu His Glu Ile		
155	115	120	125
156	Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro Pro Leu Leu His		
157	130	135	140
158	His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn Glu Phe His Val		
159	145	150	155 160
160	Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met Met Ser Leu Ser		
161	165	170	175
162	Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly Thr Ile Ile Tyr		
163	180	185	190
164	Met Pro Pro Glu Asn Tyr Glu Pro Gly Gln Lys Ser Arg Ala Ser Ile		
165	195	200	205
166	Lys His Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp Glu Val Leu Ser		
167	210	215	220
168	Arg Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu Gln Ile Met Tyr		
169	225	230	235 240
170	Ser Val Ser Gln Gly His Arg Pro Val Ile Asn Glu Glu Ser Leu Pro		
171	245	250	255
172	Tyr Asp Ile Pro His Arg Ala Arg Met Ile Ser Leu Ile Glu Ser Gly		
173	260	265	270
174	Trp Ala Gln Asn Pro Asp Glu Arg Pro Ser Phe Leu Lys Cys Leu Ile		
175	275	280	285
176	Glu Leu Glu Pro Val Leu Arg Thr Phe Glu Glu Ile Thr Phe Leu Glu		
177	290	295	300
178	Ala Val Ile Gln Leu Lys Lys Thr Lys Leu Gln Ser Val Ser Ser Ala		
179	305	310	315 320
180	Ile His Leu Cys Asp Lys Lys Lys Met Glu Leu Ser Leu Asn Ile Pro		
181	325	330	335
182	Val Asn His Gly Pro Gln Glu Glu Ser Cys Gly Ser Ser Gln Leu His		
183	340	345	350
184	Glu Asn Ser Gly Ser Pro Glu Thr Ser Arg Ser Leu Pro Ala Pro Gln		
185	355	360	365
186	Asp Asn Asp Phe Leu Ser Arg Lys Ala Gln Asp Cys Tyr Phe Met Lys		
187	370	375	380
188	Leu His His Cys Pro Gly Asn His Ser Trp Asp Ser Thr Ile Ser Gly		
189	385	390	395 400
190	Ser Gln Arg Ala Ala Phe Cys Asp His Lys Thr Ile Pro Cys Ser Ser		
191	405	410	415
192	Ala Ile Ile Asn Pro Leu Ser Thr Ala Gly Asn Ser Glu Arg Leu Gln		
193	420	425	430
194	Pro Gly Ile Ala Gln Gln Trp Ile Gln Ser Lys Arg Glu Asp Ile Val		
195	435	440	445

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196   Asn Gln Met Thr Glu Ala Cys Leu Asn Gln Ser Leu Asp Ala Leu Leu
197       450                      455                      460
198   Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu Val Ser Thr Lys
199       465                      470                      475                      480
200   Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp Thr Thr Asp Ile
201                      485                      490                      495
202   Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys Leu Lys Asp Asn
203                      500                      505                      510
204   Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu Val Val Ser Arg
205                      515                      520                      525
206   Ser Pro Ser Leu Asn Leu Leu Gln Asn Lys Ser Met
207       530                      535                      540
209 <210> SEQ ID NO: 3
210 <211> LENGTH: 1620
211 <212> TYPE: DNA
212 <213> ORGANISM: Homo sapiens
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215   ctgcgctacc tgagccgcgg cgctctggc actgtgtcgt ccgcccgcca cgcagactgg      120
216   cgcgtccagg tggccgtgaa gcacctgcac atccacactc cgctgctcga cagtgaaga      180
217   aaggatgtct taagagaagc tgaaatttta cacaagcta gatttagtta cattcttcca      240
218   attttgggaa tttgcaatga gcctgaattt ttgggaatag ttactgaata catgccaaat      300
219   ggatcattaa atgaactcct acataggaaa actgaatatc ctgatgttgc ttggccattg      360
220   agatttcgca tcctgcatga aattgccctt ggtgtaaatt acctgcacaa tatgactcct      420
221   cctttacttc atcatgactt gaagactcag aatatcttat tggacaatga atttcatgtt      480
222   aagattgcag attttggttt atcaaagtgg cgcatgatgt ccctctcaca gtcacgaagt      540
223   agcaaactct caccagaagg agggacaatt atctatatgc cacctgaaaa ctatgaacct      600
224   ggacaaaaat caagggccag tatcaagcac gatatatata gctatgcagt tatcacatgg      660
225   gaagtgttat ccagaaaaca gccttttgaa gatgtcacca atcctttgca gataatgtat      720
226   agtgtgtcac aaggacatcg acctgttatt aatgaagaaa gtttgccata tgatatacct      780
227   caccgagcac gtatgatctc tctaatagaa agtggatggg caaaaatcc agatgaaaga      840
228   ccatctttct taaaatgttt aatagaactt gaaccagttt tgagaacatt tgaagagata      900
229   acttttcttg aagctgttat tcagctaaag aaaacaaagt tacagagtgt ttcaagtgcc      960
230   attcacctat gtgacaagaa gaaaatggaa ttatctctga acatacctgt aaatcatggt      1020
231   ccacaagagg aatcatgtgg atcctctcag ctccatgaaa atagtgggtc tcctgaaact      1080
232   tcaagggtccc tgccagctcc tcaagacaat gattttttat ctagaaaagc tcaagactgt      1140
233   tattttatga agctgcatca ctgtcctgga aatcacagtt gggatagcac catttctgga      1200
234   tctcaaaggg ctgcattctg tgatcacaag accattccat gctcttcagc aataataaat      1260
235   ccactctcaa ctgcaggaaa ctcagaacgt ctgcagcctg gtatagccca gcagtggatc      1320
236   cagagcaaaa gggaagacat tgtgaaccaa atgacagaag cctgccttaa ccagtcgcta      1380
237   gatgcccttc tgtccaggga cttgatcatg aaagaggact atgaacttgt tagtaccaag      1440
238   cctacaagga cctcaaaagt cagacaatta ctagacacta ctgacatcca aggagaagaa      1500
239   tttgccaag ttatagtaca aaaattgaaa gataacaaac aaatgggtct tcagccttac      1560
240   ccggaaatac ttgtggtttc tagatcacca tctttaaatt tacttcaaaa taaaagcatg      1620
242 <210> SEQ ID NO: 4
243 <211> LENGTH: 300
244 <212> TYPE: PRT
245 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 4

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